## ABSTRACT

The present invention provides a novel method of producing the 12-membered ring macrolide compound 11107D having an antitumor activity by biological transformation. Starting material which is the 12-membered ring macrolide compound 11107B represented by the formula (I) is incubated in the presence of a strain belonging to the genus Mortierella, the genus Streptomyces or the family Micromonosporaceae (for example, Streptomyces sp. AB-1704 strain (FERM BP-8551)), each of which has the ability of transforming the 12-membered ring macrolide compound 11107B into a 11107D substance represented by the formula (II), or a preparation of its cultured mycelia and oxygen, and then 11107D substance which is a target material is collected from the treating solution.